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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Patent

Thorsten Hillesheim et al. :

Serial No.: 10/544,105 : Art Unit: 3751

Filed: August 2, 2005 : Examiner:

For: **PROPORTIONAL PRESSURE  
CONTROL VALVE** :

**SUBMISSION OF ENGLISH LANGUAGE  
PRELIMINARY EXAMINATION REPORT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith is an English language Preliminary Examination Report for the above-identified application.

Respectfully submitted,

  
Mark S. Bicks  
Reg. No. 28,770

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Dated: June 2, 2006

From the INTERNATIONAL BUREAU

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rules 44bis.3(c) and 72.2)

Date of mailing (day/month/year)  
11 May 2006 (11.05.2006)

To:

BARTELS UND PA  
Lange Strasse 51  
70174 Stuttgart  
ALLEMAGNE

Bartels und Partner  
Patentanwälte

Eingangen:  
Received: 18. MAI 2006

TERMIN .....

Applicant's or agent's file reference  
40cdh/229168

**IMPORTANT NOTIFICATION**

International application No.  
PCT/EP2004/003758

International filing date (day/month/year)  
08 April 2004 (08.04.2004)

Applicant

HYDAC FLUIDTECHNIK GMBH et al

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

**2. Transmittal of the copy of the translation to the designated or elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

**It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.**

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

Agnes Wittmann-Regis

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 89 70

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 40cdh/229168	<b>FOR FURTHER ACTION</b>		See item 4 below
International application No. PCT/EP2004/003758	International filing date ( <i>day/month/year</i> ) 08 April 2004 (08.04.2004)	Priority date ( <i>day/month/year</i> ) 04 June 2003 (04.06.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant HYDAC FLUIDTECHNIK GMBH			

<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
<p>3. This report contains indications relating to the following items:</p> <table> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </tbody> </table> <p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input checked="" type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of issuance of this report 01 May 2006 (01.05.2006)	
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 740 14 35	Authorized officer  Agnes Wittmann-Regis  Telephone No. +41 22 338 89 70

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

**PCT**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

Applicant's or agent's file reference <b>40cdh/229168</b>		Date of mailing <i>(day/month/year)</i> <b> </b>	
International application No. <b>PCT/EP2004/003758</b>		<b>FOR FURTHER ACTION</b> See paragraph 2 below	
International filing date <i>(day/month/year)</i> <b>08.04.2004</b>		Priority date <i>(day/month/year)</i> <b>04.06.2003</b>	
International Patent Classification (IPC) or both national classification and IPC <b> </b>			
Applicant <b>HYDAC FLUIDTECHNIK GMBH</b>			

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP	Authorized officer
<b> </b>	<b> </b>
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/003758

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
 This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material
    - in written format
    - in computer readable form
  - c. time of filing/furnishing
    - contained in the international application as filed.
    - filed together with the international application in computer readable form.
    - furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/003758

Box No. II Priority

1.  The following document has not yet been furnished:

copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).

translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2.  This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
**PCT/EP2004/003758**

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																									
<p><b>1. Statement</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Novelty (N)</td> <td style="width: 40%;">Claims</td> <td style="width: 30%; text-align: right;">YES</td> </tr> <tr> <td>Claims</td> <td>1-10</td> <td style="text-align: right;">NO</td> </tr> <tr> <td colspan="3" style="border-top: none;">Inventive step (IS)</td> </tr> <tr> <td>Claims</td> <td></td> <td style="text-align: right;">YES</td> </tr> <tr> <td>Claims</td> <td>1-10</td> <td style="text-align: right;">NO</td> </tr> <tr> <td colspan="3" style="border-top: none;">Industrial applicability (IA)</td> </tr> <tr> <td>Claims</td> <td>1-10</td> <td style="text-align: right;">YES</td> </tr> <tr> <td>Claims</td> <td></td> <td style="text-align: right;">NO</td> </tr> </table> <p><b>2. Citations and explanations:</b></p> <p>1 In the present opinion, reference is made to the following documents:</p> <p>D1: US 6 286 535 B1 (HARMS LOUIS C ET AL) 11 September 2001 (2001-09-11)</p> <p>D2: US 5 042 832 A (INOUE NAOHIKO ET AL) 27 August 1991 (1991-08-27)</p> <p>D3: PATENT ABSTRACTS OF JAPAN vol. 0112, no. 13 (M-605), 10 July 1987 (1987-07-10) &amp; JP 62 028581 A (DIESEL KIKI CO LTD), 6 February 1987 (1987-02-06)</p> <p>D4: FR 2 421 418 A (BOSCH GMBH ROBERT) 26 October 1979 (1979-10-26)</p> <p>2 INDEPENDENT CLAIM 1</p> <p>2.1 The present application does not meet the requirements of PCT Article 33(1), because the subject matter of claim 1 is not novel within the meaning of PCT Article 33(2). Document D1 discloses (the references between parentheses relate to this document):</p> <p>A proportional pressure control valve comprising a valve housing (22), which has at least three ports that conduct fluids, in particular in the form of a pump port (84), a</p>			Novelty (N)	Claims	YES	Claims	1-10	NO	Inventive step (IS)			Claims		YES	Claims	1-10	NO	Industrial applicability (IA)			Claims	1-10	YES	Claims		NO
Novelty (N)	Claims	YES																								
Claims	1-10	NO																								
Inventive step (IS)																										
Claims		YES																								
Claims	1-10	NO																								
Industrial applicability (IA)																										
Claims	1-10	YES																								
Claims		NO																								

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/003758

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

utilization port (34) and a tank port (32), a regulating piston (112) being configured to be displaced longitudinally in the valve housing (22) for the selective connection of the pump port (84) to the utilization port (34), and of the utilization port (34) to the tank port (32), which piston is provided with a connection channel (136) for establishing a fluidic connection between the pump port (84) and a servo chamber (158) of a servo valve (224, 228), the servo valve (224, 228) being controlled by a magnetic system (252), in particular a proportional magnetic system, the fluidic path (192) that is partially led through the valve housing (22) between the connection channel (136) and the tank port (32) and is simultaneously fluidically connected to the utilization port (34) being released when the servo valve (228) is open.

2.2 Documents D2 (see in particular column 8, line 30 - column 10, line 44, column 13, lines 42-54, figure 2), D3 (see in particular the abstract, figure 1) and D4 (see in particular page 2, line 31 - page 4, line 32, figure 1) also disclose a device with the features of claim 1.

3. DEPENDENT CLAIMS

3.1 The dependent claims 2-10 do not appear to contain any additional features which, in combination with the features of any claim to which claims 2-10 refer back, meet the PCT requirements for novelty. The reasons for this are as follows:

3.2 With respect to claims 2, 4-7 and 10: see document D1, in particular column 13, lines 5-48, figure 2.

3.3 With respect to claim 9: see document D2, in particular column 8, line 30 - column 10, line 44, column

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/EP2004/003758

Box No. V      **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

13, lines 42-54, figure 2.

3.4 With respect to claims 3 and 8: see document D3, in particular the abstract and figure 1.

4. INDUSTRIAL APPLICABILITY

The subject matter of claims 1-10 can be produced and can be used, and is therefore considered to be industrially applicable.